

# The Role of Families and Schools in Leading to Educational Inequalities in Secondary Schools during the Pandemic Online Learning Time

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## ABSTRACT

The COVID-19 pandemic shocked education systems in most countries worldwide, limiting educational opportunities for a large number of students in most countries. Educational inequality, which has existed for a long time, is now being further reinforced and presents the public with additional variables that could lead to uneven education for students. From two viewpoints, this study investigates educational inequality among secondary school students during the pandemic-related online education: family backgrounds and school contributions. On the basis of qualitative analysis of online education during the pandemic and a semi-structured interview, it is concluded that the digital divide, family education investment and parental support, as three main factors of family backgrounds, are responsible for the inequalities; the findings also show that differences by school resource support and by home-school collaboration should be blamed for the unequal situation.

**Keywords:** *Educational inequality, Online education, The COVID-19 pandemic, Secondary schools*

## 1. INTRODUCTION

According to a UN assessment on educational conditions during Covid-19 and beyond, the pandemic has caused the greatest disruption of school systems in history, affecting almost 1.6 billion students in over 190 nations across all continents [1]. School and other learning space closures have impacted 94 percent of the world's student population, with rates as high as 99 percent in poor and lower-middle-income nations. However, there are justified fears that this crisis will not affect students equally, but will further exacerbate and accelerate educational inequality, which had been considered the most formidable issue facing education systems in pre-COVID time [2]. The type of learning environment students' families can create at home, as well as the assistance supplied by their schools, will determine how much and how effectively they learnt during the lockdown [3]. In the fight against the Covid-19 pandemic, families and schools have been impacted to varying degrees. Due to their differing levels of resilience to serious accidents, the consequent discrepancies in educational opportunities are more extensively demonstrated than in the past — the traditional school age.

The following sections of the study will concentrate on educational inequality at home and school.

## 2. RESEARCH FINDINGS

### *2.1 Educational inequalities caused by family backgrounds*

During school closures, online schooling has been a crucial tool for continuing to build skills [4]. Simultaneously, a number of issues that received less attention and were less obvious prior to the forced and significant transfer of face-to-face courses to online platforms have suddenly surfaced. Households' access to technologies and information, for example, varies across regions or among economically diverse families, which is a much-debated topic known as the digital divide. Apart from that, parents' financial and emotional investments in their children's education, as well as parental support for students intellectually and mentally, can have a substantial impact on their academic achievement. In this section, we explore each of these three dimensions — digital divide, educational investment, and parental support — before turning to the resources provided by schools.

### 2.1.1 The Digital Divide

During the lockdowns, the Internet and digital mobile devices are used for the largest proportion of online educational activities. This shift has emphasized the significant digital gap that exists between those who have access to electricity, internet connection, and devices and those who do not [5]. While not every home in a city may be fully equipped with technological equipment for learning, students in China do not need to be concerned about internet connectivity. Students who live in rural areas, remote mountainous areas, or snowy and desert regions, on the other hand, are required to do so. Take a girl who lives in Tibet for example; due to a weak internet signal at home that prevented her from effectively completing her studies, the student had to spend four hours a day ascending snowy slopes in order to get a signal and listen to online lectures at the summit [6].

Despite the fact that the majority of students have Internet access, the learning devices they utilize differ widely. Laptops are handier for students to access resources [7], attend online classes, and finish assignments than mobile phones, which have smaller screens. To make learning more efficient, a growing number of parents are providing tablets to their children in order to reduce the learning barriers imposed by equipment malfunctions. However, according to a survey conducted by China Education Policy Research Institute at Beijing Normal University, one-third of Chinese students who study at home do not have access to a computer that can be utilized for online learning [8].

### 2.1.2 Family Educational Investment

While the digital divide has received a lot of attention as a potential obstacle to productive e-learning at home, much less has been highlighted about domestic financial investment in education and availability of appropriate study space at home. It is well-documented that the quantity and quality of learning were decreased to varying degrees for students from disadvantaged families [9]. On the other hand, children in better-off families spent more time on educational activities overall and on virtually every educational activity individually than their less well-off peers. Parents of more privileged students tend to be more inclined to allocate their money to one-on-one tutorials, extra-curricular activities that might be advantageous to their children, or other training programs.

Additionally, a dedicated study room or space is also important for the e-learning process. Children from wealthier families are also more likely to have access to a dedicated learning space, whether it is shared or not. However, many students still do not have their own study place, which might have a deleterious impact on their concentration and efficiency [10].

### 2.1.3 Parental Support

As much as it is a test of the government and educational institutions, school closure is a test of individual qualifications and awareness on the part of parents. While most responsible parents are ready to spend time with their children at home, many are unable to give the practical academic and spiritual assistance that parents who are more educationally attentive and academically proficient are highly possible to provide. This is a reflection of educational injustice, which is exacerbated by distance schooling. It is notable that many more parents are preoccupied with their career, making it not available for them to spend time with their children, let alone support them in their schooling. Furthermore, some parents these days underestimate the family's role in a student's academic achievement; it is not uncommon for students to be denied sufficient care and assistance from their families due to a lack of parents' educational awareness.

## 2.2 Educational inequalities caused by schools

Resources and support from schools should be differentiated from the individual contribution of teachers during the online schooling period. According to the study, the curriculum and learning experience supplied to students in online classrooms is somewhat inconsistent, as many schools have no overall control over the quality of services and resources provided to students. Many less-competent schools, for example, merely have a general requirement for teachers to cover their instructing tasks, leaving a high degree of flexibility. Students will have a better home learning experience if a teacher is well resilient to distant emergency education and motivated to do some further exploration, as opposed to teachers who merely follow the school's fundamental criteria for online teaching.

To gather empirical examples, the author has conducted an in-depth interview with a headteacher and English lecturer at a high school in Baotou, Inner Mongolia, China. The interview process strictly followed the principle of protecting the respondent's rights and privacy and the interview content was recorded with the respondent's approval. In this section, the study explores the educational contributions of high schools and the consequent inequalities in greater detail from two perspectives, school resources, and home-school collaboration.

### 2.2.1 Differences by school resources

The home learning resources that the school can provide include lecture materials, online office hour services, electronic libraries, exercise programs, and psychological guidance. In fact, according to the survey, the high school in Baotou did not adequately provide these services and assistance to students, relying instead

more on the individual efforts of teachers. Simultaneously, many teachers just copy and paste established offline teaching approaches onto online practices. In other words, the pedagogy of online teaching has been largely disregarded [11]. Although many teachers are comfortable with remote platforms, they rarely considered combining traditional instructional content with modern technologies. As a result, students' relative resource equality cannot be guaranteed.

However, by examining the case of Yew Chung International School of Shanghai (YCIS) [12], it is apparent that they placed a great deal of emphasis and work on supporting online resources during the online learning period, which is significantly different from the strategy used by the high school in Baotou stated before. In the secondary department, YCIS offered various subscription databases for research studies, including Gale, Encyclopedia Britannica, JSTOR, BrainPOP, and the Encyclopedia of Ancient Europe. For primary and secondary students, online reading websites and platforms such as Reading Rockets, Tumble Books and SORA were available. Platforms such as Commonsense Media and Audible Stories were also utilized to assist children to develop a love of reading, enrich their knowledge, and promote parent-child engagement through joint learning. Furthermore, before the pandemic breakout, Sustech Teaching Group NO.2 Experimental School (SEG NO.2) in Shenzhen had devised and implemented a problem-based learning curriculum in which instructors mastered the usage of online learning platforms and adapted to the innovative education model [13]. After the school's closure, the institution was able to promote a series of online courses. The successful operation of online schooling was due to the initial preparations. They have made a positive difference not only for the school but also for the psychological well-being of the students and staff.

The comparison reveals that schools in developed regions demonstrated superior emergency response capabilities and rapid adjustment processes in the face of the pandemic. Moreover, they generally have a greater ability and willingness to provide students with various online learning resources, and their innovative work on curriculum content and format has been leading the way among secondary schools nationwide. At the same time, schools that are rigidly responding to the pandemic-related closures should learn from positive models, strive for resource and information exchange among schools, and do their best to create an enjoyable and appropriate learning environment for their students.

### *2.2.2 Differences by home-school collaboration*

Home-school collaboration refers to a partnership between families and schools in which parents and educators collaborate to help children thrive academically and socially [14].

According to the interview, the high school in Baotou placed a strong value on communication and cooperation between home and school, intending to remove obstacles to students' learning and "escorting" them to further education. The school, on the other hand, employed less-than-optimal tactics, such as failing to take the lead in coordinating contacts between teachers and parents. Furthermore, communication and home visits were heavily reliant on teachers' self-awareness, which increased the risk of educational inequality significantly because the school could not guarantee that every teacher would communicate with parents and fully comprehend students' online learning situation. At the same time, the school took little initiative to consider the challenges of students' families or the inconveniences of parents and did not offer to assist accordingly.

YCIS has done exceptionally well in terms of home-school collaboration [15]. During the school closure period, the initially formed Parent-Teacher Association (PTA) in this school played a critical role in the online learning process. The PTA and Wellness Team hosted a "Wellness Week" to teach parents how to communicate with their children through daily activities. The organization also offered online training classes on how to use the Zoom and Seesaw platforms to assist students in continuing their online learning by training parents on digital learning technologies. In addition, during the online learning period, SEG NO.2 gave humanitarian assistance and care to parents [16]. For example, prior to the school's online exams, the Grade Leader fully grasped the details of each family's test paper reception, printing, parental schedules and family difficulties by issuing a questionnaire and then providing appropriate solutions. This strategy considerably enhanced family-school cooperation and, more crucially, ensured effective student learning.

## **3. DISCUSSION**

The use of digital technology is an excellent support for teaching and learning since it provides a more visual picture of students' learning progress and mastery of a specific type of knowledge compared to traditional means. One of the main obstacles to the expansion of online learning among secondary school students, according to the interview, is that most schools prohibit students from bringing mobile devices to class (cell phones, tablets, computers). According to the rules, resident students are not permitted to use digital devices at school to accomplish online learning objectives, although non-resident students are allowed to use them because they are able to go home every day. Therefore, only during the school closure do these two types of students have equal access to online materials and get online instruction, because they are both home-schooled. When the temporary closure ends, however, the gap

between resident and non-resident students in terms of digital teaching and learning will widen again.

However, the aforementioned inequalities in the educational process contribute a small part to students' learning outcomes; students must rely on their self-motivation and learning abilities for academic achievements. Moreover, as a result of the Covid-19 pandemic, massive online schooling does not exacerbate inequality in all aspects. It still brings unprecedented convenience and benefits to students. In China, for example, children in non-Tier 1 and 2 cities are practically unable to access the same educational resources and privileges as students in larger cities. Due to the intense learning load and advancement tasks in secondary schools, most students choose after-school tutoring in order to improve their scores quickly. During the pandemic, the rapid growth of online education has facilitated the distribution of good educational resources to underdeveloped areas, allowing students in those areas to receive the same level of tutoring as children in developed areas, which promotes more or less educational equality.

#### 4. CONCLUSION

The most obvious finding to emerge from this study is that the pandemic-related online education revealed and aggravated the educational inequalities phenomenon that had existed before, raising our awareness of the importance of educational equality. Students' learning effects could well be influenced by their family backgrounds in various ways. Due to the digital divide, insufficient family education investment, and inadequate parental support for students' study, some of them from less privileged families may face greater inequalities or challenges. Simultaneously, major discrepancies produced by schools in the areas of home learning resource support and home-school collaboration can also exacerbate students' feelings of inequality.

Furthermore, several questions remain to be answered. In addition to knowledge acquisition, the study found that students' psychological well-being and physical condition cannot be effectively monitored and ensured due to online education. To address this issue, many schools have implemented "psychological counseling programs", although their actual outcomes have yet to be effectively evaluated. Many physical education teachers require students to record their moves by video while learning online, which might be challenging but viable. Nevertheless, this is still problematic: converting exercise from a relaxing activity to a chore that requires supervision might have a detrimental effect on students' mindsets, especially for those who are not particularly athletic, because it may discourage them to some extent. Therefore, studies need to be carried out to investigate how to ensure students' psychological safety and foster

their exercise habits in the context of online learning, two critical issues for future online education research.

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